AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended): A display apparatus for performing gray scale display by dividing one field of an image into a plurality of weighted subfields and by controlling each subfield to one of emit and not emit light based on a gray scale level of a pixel in the image, said apparatus comprising:

a converter for selectively converting the gray scale level of the pixel to one of a gray scale level in one of a first gray scale group and one or a gray scale level in a second gray scale group, said first gray scale group including a plurality of gray scale levels to be used for actual display, the gray scale level in the first gray scale group being expressed by a combination of the subfields, said second gray scale group including a plurality of gray scale levels each of which is interspersed in the gray scale levels in the first gray scale group; and

a first diffuser for generating a video signal, said video signal displaying a gray scale level obtained by the converter when the gray scale level obtained by the converter is in the first gray scale group, and when the gray scale level obtained by the converter is in the second gray scale group, the diffuser generating a video signal displaying a gray scale level obtained by diffusing a predetermined value corresponding to the gray scale level in the second gray scale group.

2. (Previously Presented): The apparatus according to claim 1, wherein the first gray scale group includes gray scale levels each of which is achieved by subfields in which there is no non-emitting subfields in subfields having weights less than a greatest weight among weights of the subfields to be emitted for achieving the gray scale level.

3. (Previously Presented): The apparatus according to claim 1, wherein the first gray scale group includes gray scale levels each of which is achieved by subfields in which there is at most one non-emitting subfield in the subfields having weights less than a greatest weight among weights of the subfields to be emitted for achieving the gray scale level.

4. (Previously Presented): The apparatus according to claim 1, wherein the first gray scale group includes gray scale levels each of which is achieved by subfields in which there is at most two non-emitting subfields in subfields having weights less than a greatest weight among weights of the subfields to be emitted for achieving the gray scale level.

5. (Previously Presented): The apparatus according to claim 2, wherein said non-emitting subfield excludes a subfield having a minimum weight.

6. (Previously Presented): The apparatus according to claim 3, wherein said non-emitting subfield excludes a subfield having a minimum weight.

7. (Previously Presented): The apparatus according to claim 4, wherein said non-emitting subfield excludes a subfield having a minimum weight.

8. (Previously Presented): The apparatus according to claim 2, wherein said non-emitting subfield excludes a subfield having a minimum weight and a subfield having a next succeeding minimum weight.

9. (Previously Presented): The apparatus according to claim 3, wherein said non-emitting subfield excludes a subfield having a minimum weight and a subfield having a next succeeding minimum weight.

10. (Previously Presented): The apparatus according to claim 4, wherein said non-emitting subfield excludes a subfield having a minimum weight and a subfield having a next succeeding minimum weight.

11. (Previously Presented): The apparatus according to claim 2, wherein said non-emitting subfield excludes a subfield having a minimum weight, a subfield having a next succeeding minimum weight and a subfield having a third succeeding minimum weight.

12. (Previously Presented): The apparatus according to claim 3, wherein said non-emitting subfield excludes a subfield having a minimum weight, a subfield having a next succeeding minimum weight and a subfield having a third succeeding minimum weight.

13. (Previously Presented): The apparatus according to claim 4, wherein said non-emitting subfield excludes a subfield having a minimum weight, a subfield having a next succeeding minimum weight and a subfield having a third succeeding minimum weight.

14. (Previously Presented): The apparatus according to claim 1, wherein the first diffuser generates the video signal to display the gray scale level in the first gray scale group which is obtained by one of adding and subtracting a value corresponding to the gray scale to be displayed to or from the gray scale level in the second gray scale group when the converted gray scale level from the gray scale converter is in the second gray scale group.

15. (Currently Amendment): The apparatus according to claim 1, further comprising a second diffuser for diffusing a difference between the gray scale level of a pixel to be displayed and the converted gray scale level [[to]] of pixels adjacent to the pixel to be displayed with a predetermined ratio.

16. (Previously Presented): The apparatus according to claim 15, wherein the second diffuser determines a value to be diffused in a vertical direction based on a value obtained by removing the lower bits from a difference between the gray scale level of the pixel to be displayed and the converted gray scale level.

17. (Currently Amended): A display method for performing gray scale display by dividing one field of an image into a plurality of weighted subfields and by controlling each subfield to one of emit and not emit light based on a gray scale level of a pixel in the image, said method comprising:

selectively converting a gray scale level of the pixel to one of a gray scale level in a first gray scale group and or a gray scale level in a second gray scale group, said first gray scale group including a plurality of gray scale levels for actual display, the gray scale level in the first gray scale group being expressed by a combination of the subfields, said second gray scale group including a plurality of gray scale levels each of which is interspersed in the gray scale levels in the first gray scale group; and

generating a video signal, said video signal displaying a gray scale level obtained by the conversion when the gray scale level obtained by the conversion is in the first gray scale group, and when the gray scale level obtained by the conversion is in the second gray scale group, generating a video signal displaying a gray scale level which is obtained by diffusing a predetermined value corresponding to the gray scale level in the second gray scale group.

18. (Previously Presented): The method according to claim 17, wherein the first gray scale group includes gray scale levels each of which is achieved by subfields in which there is no non-emitting subfields in subfields having weights less than a greatest weight among weights of the subfields to be emitted for achieving the gray scale level.

19. (Previously Presented): The method according to claim 17, wherein the first gray scale group includes gray scale levels each of which is achieved by subfields in which there is at most one non-emitting subfield in subfields having weights less than a greatest weight among weights of the subfields to be emitted for achieving the gray scale level.

20. (Previously Presented): The method according to claim 17, wherein the first gray scale group includes gray scale levels each of which is achieved by subfields in which there is at most two non-emitting subfields in subfields having weights less than a greatest weight among weights of the subfields to be emitted for achieving the gray scale level.

21. (Original): The method according to claim 18, wherein said non-emitting subfield excludes a subfield having the minimum weight.

22. (Original): The method according to claim 19, wherein said non-emitting subfield excludes a subfield having the minimum weight.

23. (Original): The method according to claim 20, wherein said non-emitting subfield excludes a subfield having the minimum weight.

24. (Previously Presented): The method according to claim 18, wherein said non-emitting subfield excludes a subfield having a minimum weight and a subfield having the next succeeding minimum weight.

25. (Previously Presented): The method according to claim 19, wherein said non-emitting subfield excludes a subfield having a minimum weight and a subfield having a next succeeding minimum weight.

26. (Previously Presented): The method according to claim 20, wherein said non-emitting subfield excludes a subfield having a minimum weight and a subfield having a next succeeding minimum weight.

27. (Previously Presented): The method according to claim 18, wherein said non-emitting subfield excludes a subfield having a minimum weight, a subfield having a next succeeding minimum weight and a subfield having a third succeeding minimum weight.

28. (Previously Presented): The method according to claim 19, wherein said non-emitting subfield excludes a subfield having a minimum weight, a subfield having a next succeeding minimum weight and a subfield having a third succeeding minimum weight.

29. (Previously Presented): The method according to claim 20, wherein said non-emitting subfield excludes a subfield having a minimum weight, a subfield having a next succeeding minimum weight and a subfield having a third succeeding minimum weight.

30. (Previously Presented): The method according to claim 17, wherein the generating the video signal to display the gray scale level in the first gray scale group which is obtained by one of adding and subtracting a value corresponding to the gray scale to be displayed to or from the gray scale level in the second gray scale group when the converted gray scale level from the gray scale conversion is in the second gray scale group.

31. (Currently Amended): The method according to claim 17, further comprising diffusing a difference between the gray scale level of a pixel to be displayed and the converted gray scale level [[to]] of pixels adjacent to the pixel to be displayed with a predetermined ratio.

32. (Previously Presented): The method according to claim 31, wherein the diffusing determines a value to be diffused in a horizontal direction based on lower bits of all bits which indicate the gray scale level of a pixel to be displayed, and a value to be diffused in a vertical direction based on a value obtained by removing the lower bits from a difference between the gray scale level of the pixel to be displayed and the converted gray scale level.